EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
VT	VTD048141741

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Jard Company, Inc.	Bowen Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Bennington	VT	05201	Bennington	003	VT01

09 COORDINATES LATITUDE 42 53 21. LONGITUDE 073 11 24.

10 DIRECTIONS TO SITE (Starting from nearest public road)

Turn onto North Branch Street at the intersection of Route 7 and N. Branch St in Bennington. Follow N. Branch St to Park St. Take right onto Park St . Approximately 0.1 miles is Bowen Road. Follow Bowen Road approximately 0.25 miles. Jard is on left.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Lawrence Levy Trustee	700 Centre, Suite 901, 700-704 E. Franklin

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Richmond	VA	23219	( )

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL: ____________ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL

☐ F. OTHER: ____________ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: __/__/__ MONTH DAY YEAR ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: __/__/__ MONTH DAY YEAR ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES DATE 09/19/90 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE ☐ D. OTHER CONTRACTOR

☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: ____________ (Specify)

CONTRACTOR NAME(S): ____________

02 SITE STATUS (Check one)

☐ A. ACTIVE ☒ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION

1969 (BEGINNING YEAR) 1989 (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

PCBs, phthalates, VOCs detected in on-site soil and ground water samples.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Confirmed Soil and ground waetr contamination on site.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☒ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Chuck Schwer	ANR/DEC	(802) 244-8702

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Michael Young	ANR	DEC	(802) 244-8702	07/01/91 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

Jard Company, Inc.

Bowen Road

Bennington, Vermont

EPA ID # VTD048141741

Potential Hazardous Waste Site

Preliminary Assessment

July 1991

Hazardous Materials Management Division

Department of Environmental Conservation

Vermont Agency of Natural Resources

Prepared By: Michael Young

Michael Young

Reviewed By: Dave Shepard

Dave Shepard

Reviewed By: Chuck Schwer

Chuck Schwer

I. Introduction

The Hazardous Materials Management Division (HMMD), Department of Environmental Conservation (DEC), conducted a Preliminary Assessment (PA) of Jard Company, Inc., Bowen Road, Bennington, Vermont, under a cooperative agreement with the Environmental Protection Agency (EPA). This PA complies with the requirements set forth under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended. It does not necessarily fulfill the requirements of other regulations. The PA is not intended to be a definitive study of the facility, so it is not suitable for use in planning site remediation or undertaking enforcement against potentially responsible parties. The PA is the first step in the site screening process set forth by the National Contingency Plan.

The Jard Company, Inc. operated from 1969 to 1989 and manufactured capacitors, non-fluid transformers and motors used in household appliances. In September 1989 the company filed for Chapter 11 bankruptcy. Analysis of test pit soil/groundwater samples and monitor well samples revealed elevated levels of volatile organic chemicals (VOCs), base neutral/acid extractables, polychlorinated biphenyls (PCBs) and heavy metals.

Jard is located on Bowen Road in the town of Bennington, Bennington County, Vermont, at 42° 53' 21" north latitude and 073° 11' 24" west longitude. The approximate elevation of the building is 680 feet. The site is in an area encompassing recreational, residential and industrial land uses. Jard is bounded to the north by industrial and residential homes, the east by woodland and a State of Vermont Agency of Transportation District Garage, the south by the Roaring Branch of the Walloomsac River, Mt. Anthony High School and the business district of Bennington, and the west by little league fields residential homes and a shopping center (Figure 2,3).

II. Site History

The Jard Company operated at the Bowen Road facility from 1969 until it filed for bankruptcy in September 1989. When the company filed for bankruptcy the property encompassed 34 acres (Figure 3). Jard acquired the acreage in three separate purchases. The original 9 acres on which the Jard facility is located was purchased in 1969, an additional 2.15 acres was acquired in 1977 and the final 22.9 acres in 1979 (1a,b). Prior to Jard acquiring the original 9 acre parcel the land is believed to have been open and wooded. The remaining 20 to 25 acres are mainly undeveloped woodlands. The owners of a nearby mobile home park have expressed interest in purchasing approximately 22 acres of the woodland for expansion of the trailer park (1a).

Jard produced small capacitors, non-fluid transformers (up to 75 KVA) and electric motors. Capacitors contained up to 75 pounds of dielectric fluids (2a). Jard employed 250 people on 3 shifts.

The first step in the production of the capacitors was the production of foil windings. These windings were then placed in metal housings and impregnated with dielectric fluids. Once the capacitors are impregnated, they are degreased, tested and painted. The manufacture process for the transformers involved a similar process: foil winding, unit assembly, varnishing and testing (2a).

Hazardous wastes generated during the manufacture process included di-octyl phthalate (DOP), waste hydraulic and lubricating oils, waste paints and paint solvents, waste varnish and varnish solids, methylene chloride, trichloroethylene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), rejected capacitors and DOP wastewater (1b,2a). Prior to Jard switching to DOP, polychlorinated biphenyls (PCBs) were used as impregnating fluids. Types of PCBs used include aroclor 1242 and aroclor 1016. The aroclor 1242 was used prior to 1971 while aroclor 1016 was used from 1971 to the switch to DOP in 1978. Between 1971 and 1974, Jard received an average of 550,000 pounds of PCBs annually (1c). In January 1978, Jard discontinued its use of PCBs and began using DOP (2b).

PCB waste generated by Jard included liquid waste and rejected capacitors. Prior to 1972, the liquid PCB wastes were drummed and taken to the Bennington Landfill (VTD981064223) for disposal. Between 1972-1981 liquid wastes were reportedly shipped out of state for disposal. Rejected capacitors were also disposed of at the Bennington Landfill. Between 1971 and 1975, Jard disposed of an average of 38,425 pounds of PCBs annually in rejected capacitors. Beginning in 1976 rejected capacitors were reportedly sent out of state for disposal (3a,b). There are allegations by a former Jard employee that rejected capacitors had been used as fill on Jard property (1b).

The Jard facility is connected to the Bennington Wastewater facility via the municipal system. Industrial discharges to the municipal system are believed to have ceased in 1974. The types of industrial discharge is unknown. Samples of effluent collected in December 1974, June 1975 and January 1976 indicated total PCB concentrations up to 286 ppb (1c).

A notification of hazardous waste activity filed with the DEC in July 1981, identified the generation of rejected capacitors and waste fluids. Jard rejected approximately 20,000 pounds of capacitors per month. The capacitors were shipped out of state for disposal. The waste flammable fluids generated were reclaimed and blended with heavy fuel oils and stored in a 2,000 gallon above ground storage tank. The types of fluids were not specified. Approximately 300 gallons of waste fluids were generated each month. The blended oil was removed from Jard by waste oil haulers (2c).

In October 1979, a dark oily stained area was noticed near the rear of the Jard building. The stained soils were in the vicinity of a pipe that vented vapors from the evacuation system. The stained area totaled approximately 100 square feet to a depth of 2 to 3 inches. Analysis of a soil sample indicated a level of 330 mg/kg of aroclor 1016. Jard agreed to cover the stained area with 6 inches of soil containing 30% clay (2d). Jard completed covering the area in April 1980 (2e).

In November 1981, under the direction of the EPA, Versar Inc. performed an inspection to document the compliance of Jard with Federal PCB Disposal and Marking Regulations (40 CFR 761) as it pertained to the use of PCBs in capacitor manufacturing and the presence of PCBs in transformers, in service capacitors, hydraulic and heat transfer systems and stored waste PCBs. No areas of non-compliance were noted (2f).

In October 1981, Jard's waste oil contractor contacted the DEC voicing concerns that Jard might try to ship stockpiled PCBs with the waste oils (2g). Samples collected from Jard's waste oil in October 1981, December 1981 and March 1982, revealed aroclor 1242 at 78 ppm, 50 ppm and 50 ppm respectively (2h).

Between March 1982 and September 1989, the DEC conducted six RCRA inspections of the facility (January 1979, March 1982, October 1982, October 1986, December 1986, September 1989). After two inspections (March 1982, October 1986) Notice of Violations were issued to Jard for violations of Vermont Hazardous Waste Regulations. These violations include but were not limited to storage over three month limits, no daily inspections or checklists, improper storage and no contingency plan training (2i,j). During a follow up inspection in January 1987, zinc oxide was noted in the vicinity of a dust collector. A drywell containing DOP wastewater was noted. The dry well may also have received PCB contaminated wastewater (2k). The final RCRA inspection occurred in September 1989. This inspection occurred in response to information that Jard was in bankruptcy. During a walk around of the building a grayish sludge was noted around a concrete tank. The sludge appeared to be a waste paint and had an odor of DOP. A survey of the outdoor hazardous waste storage area revealed 26 fifty-five gallon drums and 25 five gallon drums of assorted solvents, paints, and oils. The majority of these drums seem to contain unused products (1b). The 2,000 gallon above ground tank also appeared to be full of liquid. Inside the building 138 drums and approximately 21 cubic yards of rejected capacitors were noted. It is not known if the drums inside the building were full (2a).

In November 1989, the DEC was notified by the Jard trustee that a Phase I Site Assessment detected contamination at Jard (1c). A total of 15 soil/sediment/liquid samples as well as a field blank were collected. A description of sample locations is listed in Table 1 and illustrated in Figure 4. Samples collected were analyzed for heavy metals, base neutral/acid extractables, volatile organic chemicals (VOCs) and PCBs. The major heavy metal detected was zinc. Soil samples detected levels of zinc up to 466,000 mg/kg (Table 3, Figure 3). Liquid samples collected from the drywell and the concrete vault detected zinc at levels up to 5.55 mg/l. Mercury was detected in four samples (JC01, JC06, JC12, JC14) at 0.25 mg/kg, 1.41 mg/l, 0.0004 mg/l and 2.43 mg/kg 2 (Table 2). Bis (2-ethylhexyl) phthalate and aroclor 1242 was detected in soils at levels up to 30,000 mg/kg and 820 mg/kg respectively. Aroclor 1242 and bis (2-ethylhexyl) phthalate were detected at levels of 4,900 mg/kg and 36,000 mg/kg in sediments collected from a floor drain inside the Jard building. VOCs detected in soil samples include 1,1,1-trichloroethane (up to 560 ug/kg), trichloroethene (up to 4,300 ug/kg) and methylene chloride (up to 220 ug/kg) (1b).

To further characterize the contamination, a Phase II Site Assessment was undertaken. Test pits and monitor wells were installed (Figure 3). Results of groundwater and soil analysis are in Tables 5 and 6. During installation of TP-3, dark oily free product was encountered approximately 3.5 feet below land surface. TP-3 and MW-3 were installed in the vicinity of a suspected leachfield. A sheen was also noted when the groundwater table was reached at 6.5 feet in TP-5. Analysis of test pit soil again revealed elevated levels of bis (2-ethylhexyl) phthalate, aroclor 1242 and zinc. Analysis of groundwater samples from MW-3 were reported in aqueous and non-aqueous phases. Each phase was analyzed for VOCs, semivolatile organic chemicals (SVOCs) and PCBs. The entire sample was analyzed for phalates and zinc (Table 6).

Currently the facility is unused. A four foot fence has been erected around the building to limit access. A perimeter survey of the building identified several locations where individuals had crossed the fence. Power and water remain connected to the building.

Jard is connected to municipal water and sewer services. In 1978, Jard had a drilled well installed to supply additional water. It is not known if the well supplied water for drinking/sanitary or industrial uses. Three concrete underground vaults were identified. Perforations are visible in one of the vaults tentatively identifying it as a drywell. The function of the drywell/vault is not known. A large above ground tank with a faded hazardous waste placard and a air hopper were also identified to the rear of the building. Two vent pipes were located in the vicinity of the dry well and concrete vault. These pipes may be connected to another concrete storage vault. A leachfield may have been installed in the vicinity of MW-3, but its existence cannot be verified since blueprints are not available for the building (1b). The building contains several floor drains. It is not known if they discharge to the drywell/vaults or the municipal sewer system (1b). Two outdoor drum storage areas were noted. The storage areas are constructed with chain fence and are roofed. The large cage contained 25 to 30 drums of various sizes and is located on the east side of the building. Approximately 75 drums were stacked on their side beside the large storage area. The smaller storage area is located along the west side of the building and contained 3 to 5 fifty-five gallon drums.

III. Environmental Setting

The Jard Company, Inc. is located on Bowen Road in the town of Bennington, Vermont. Preliminary 1990 Census data indicate Bennington has a population of 16,451 (4).

Four sites listed in the CERCLIS database are located within a mile of the Jard facility (Figure 2). These sites include Kocher Drive Dump (VTD982542792), former Schmeltzer Property (VTD988367017), Eveready Battery Company (VTD002065597) and Catamount Dyers (VTD057019796) (5).

Bennington lies within the Vermont Valley physiographic subdivision. This valley separates the Taconic Mountains from the Green Mountains and is characterized by soft non-crystalline bedrock as opposed to the harder crystalline rock found in the mountain subdivisions (6,7,8) The site is underlain by Dunham Dolomite (Cd), a thick bedded siliceous buff or gray dolomite containing well rounded sand grains which are irregularly distributed. To the west is the Monkton Quartzite (Cm), a white gray or buff colored sandy dolostone with inter-bedded dolomitic sandstone and black or green phyllite (7,8).

Surficial materials have been mapped as glacial outwash (9). The area is mantled by thick deposits of coarse grained, stratified glacial drift having an excellent groundwater potential. Wells in this type of surficial material generally yield enough water for industrial and public water supplies (10). Test pit logs and the Well Completion Report (WCR) for the Jard well indicate the general surficial conditions on-site to consist of sand, gravel and cobbles. The reported yield of the Jard well (60 gpm) and the Triangle well (75 gpm) seem to support the conclusion that the area has excellent groundwater potential.

The Soil Conservation Service has identified soil types in the area as Hero gravelly sand loam with 0-3% slopes. These soils are characterized as being moderately well drained with very rapid permeability. This soil typically has a gravelly loamy sand or gravelly sandy loam surface layer. The subsoil and underlying material consist of gravelly or very gravelly sand (11).

Groundwater levels as measured in June 1990 varied from 2.9 feet to 8.0 feet below land surface. The groundwater flow is believed to be in a southeasterly direction from MW-1 to MW-2 (1e).

Residents within the area generally rely on the Bennington Water Department (WSID #5016) for a source of water. This system has approximately 3,000 connections serving a total population of 13,000. The primary source for the system is Bolles Brook. The site is not in the watershed for Bolles Brook. The backup supply for the system is Morgan Spring. The spring can supply 1,000 gallons per minute and is located approximately 0.7 miles southeast of the site (Figure 2). The site is not located within the delineated aquifer protection area/well head protection area (APA/WHPA) for Morgan Spring (Figure 2) (13).

Rare, endangered or threatened species, or significant natural communities are not found within a mile radius of the site. A exemplary flood plain forest and a rare occurrence of the hairy honeysuckle (<u>Lonicera</u> hirsuta) are found within 15 miles downstream of the site (1f).

Wetlands that could be impacted include palustrine scrub-shrub and open water wetlands and riverine beachbar and open water wetlands along the Roaring Branch of the Walloomsac River and Furnace Brook (Figure 4) (14). The closest reporting station for precipitation is in Searsburg approximately 14 miles east of Bennington. The station reports a 20 year average annual precipitation of 53.29 inches (15). The mean annual lake evaporation is about 26 inches for a net annual precipitation of 27.29 inches (16). This figure may be high since Searsburg is at a higher elevation than Bennington.

IV. Receptors

Identified receptors include soils and groundwater. Analysis of soil samples from tests pits on site reveal detectable levels of VOCs, base neutral/acid extractables, metals and PCBs. Analysis of test pit and monitor well groundwater samples have also revealed elevated levels of VOCs, SVOCs, metals and PCBs. Groundwater flow has been postulated to be in a southeasterly direction toward the Roaring Branch of the Walloomsac. If this is true then the Roaring Branch would also be a receptor. If the Roaring Branch is a receptor, wetlands located along the river may also be affected.

Although the Jard facility is fenced, human exposure may also occur, since the fence has been climbed and cut since installation.

V. Recommendations and Conclusions

The Jard Company manufactured capacitors, transformers and small electric motors between 1969 and 1989 and employed approximately 250 people. The company declared bankruptcy in 1989. Jard was classified as a generator of hazardous waste in the State of Vermont (>1,000 lbs/mo). Wastes generated during the manufacturing process include PCBs, DOP, 1,1,1-TCA, TCE, hydraulic and lubricating oils, paints, varnish, oil soaked speedi-dri and rejected capacitors. The use of PCB oils in the manufacture process was phased out in 1978 and replaced by DOP oils. Analysis of soil and groundwater samples have identified VOCs, phthalates, metals and PCBs as being present on-site. Hazardous chemicals are also stored on-site. For these reasons a high priority is given for a Screening Site Inspection (SSI) for Jard.

VI. References

1. Jard Company File, Sites Management Section, HMMD, VT DEC:

   a. Griffin, John P., Realtor, Letter and Report on 18.78 acre parcel of Jard property to be obtained for mobile home park expansion.

   b. Wehran Envirotech, 1989, Draft Environmental Site Assessment of Jard Company Property in Bennington, Vermont.

   c. Morse, James W. III and Virginia Garrison, 1976, PCBs in Vermont, Agency of Environmental Conservation.

   d. Levy, Lawrence, Jard Trustee, Notification letter to Diane Conrad, VT DEC, November 26, 1989.

   e. Wehran Envirotech, 1990, Phase 2 Environmental Site Assessment, Jard Company Property Bennington, Vermont.

   f. Marshall, Everett, Vermont Fish and Wildlife, Memorandum to Michael Young, May 24, 1991.

2. Jard Company File Waste Management and Prevention Section, Hazardous Materials Management Division, VT DEC:

   a. Rota, Kenneth, VT DEC, RCRA Inspection Report, September 20, 1989.

   b. Fradkoff, Steven P., EPA, Trip Report, March 15, 1982.

   c. Paquin Thomas T., Jard Company, Notification of Hazardous Waste Activity, July 1, 1981.

   d. Nichols, Robert, VT AEC, Memorandum to John Malter, VT AEC, April 3, 1980.

   e. Paquin, Thomas T., Jard, Letter to Robert Nichols, VT AEC, May 20, 1980.

   f. Versar, Inc., Report on Inspection to Determine Compliance with the Federal PCB Disposal and Marking Regulations, November 19, 1981.

   g. Nichols, Bob, VT AEC, Memorandum to John Malter, VT AEC, October 22, 1981.

h. Fradkoff, Steven P., EPA, Trip Report, March 16, 1982.

i. Nichols, Robert, VT AEC, Letter to Thomas Paquin, March 12, 1982.

j. Gulka, Gary, VT AEC, Notice of Violation to Charles Watson, Jard Co., November 17, 1986.

k. Rota, Kenneth, VT DEC, Memorandum to Jard File, January 22, 1987.

3. Bennington Landfill File, Sites Management Section, HMMD, VT DEC:

   a. Rollins, Richard, Jard Co., Letter dated September 9, 1975, to Stanley Legrow, EPA.

   b. Plant Visit Notes dated January 19, 1976.

4. Burlington Free Press, 1991, Vermont 1990 Population by County by Town, March 31, 1991, Section A, Page 3.

5. CERCLIS Database Listing, 1991, EPA.

6. Vermont Department of Highways, 1968, Survey of Highway Construction Materials in the Town of Bennington, Bennington County, Vermont.

7. Mac Fayden, John A., 1956, The Geology of the Bennington Area, VT, Vermont Geologic Survey, Vermont Development Department.

8. Doll, Charles, et al., 1961, Centennial Geologic Map of Vermont, Vermont Geologic Survey, Vermont Development Department.

9. Stewart, D.P. and P. MacClintock, 1970, Surficial Geologic Map of Vermont, Vermont Geologic Survey, Vermont Development Department.

10. Hodges, A.L. and D.Butterfield, 1961, Groundwater Favorability Map of the Battenkill, Walloomsac River and Hoosic River Basins, Water Resources Department, VT DEC.

11. Soil Survey Interpretations, 1970, Soil Conservation Service, USDA.

12. Vermont Department of Health, 1990, Public Water System Inventory.

13. ____________________, 1990, Water System Overlays.

14. National Wetlands Inventory Map, 1977, Bennington, VT, Quadrangle, U.S. Department of the Interior.

15. National Climatic Data Center, 1986, Climatological Data Annual Summary, New England, NOAA, Vol. 98, No. 13.

16. ________________, 1979, Mean Annual Lake Evaporation, Climatic Atlas of the United States, U.S. Department of Commerce.

Topographic Maps

Bennington, VT, 7.5 Minute Quadrangle, US Forest Service, 1:24000 Pownal, VT, 7.5 Minute Quadrangle, USGS, 1:24000

Orthophotos

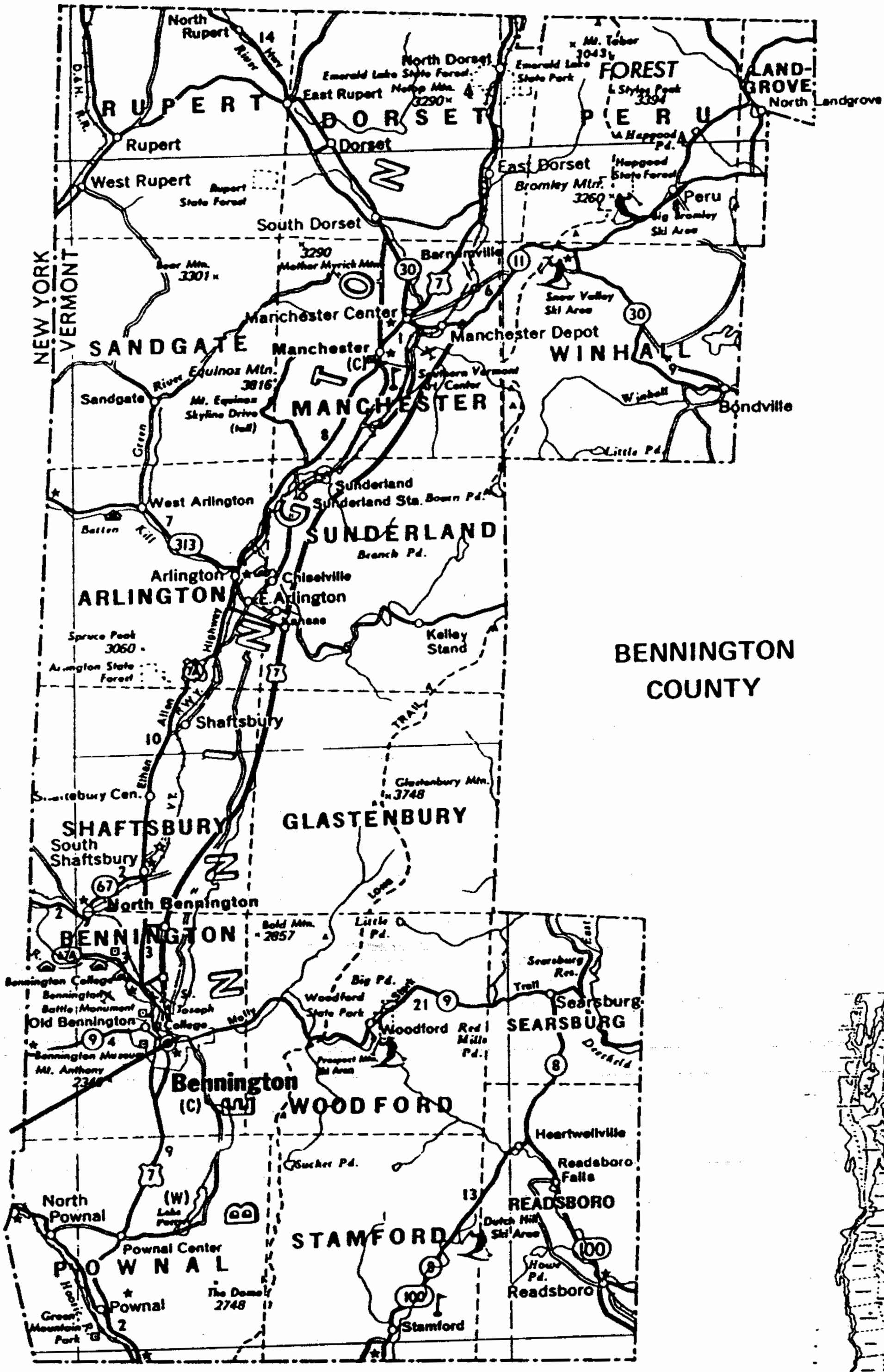
Sheet Name	Sheet Number	Scale
Bennington	092040	1:5000
Bennington, East	096040	1:5000
Brooklyn School	096043	1:1250
Veterans Home	095043	1:1250

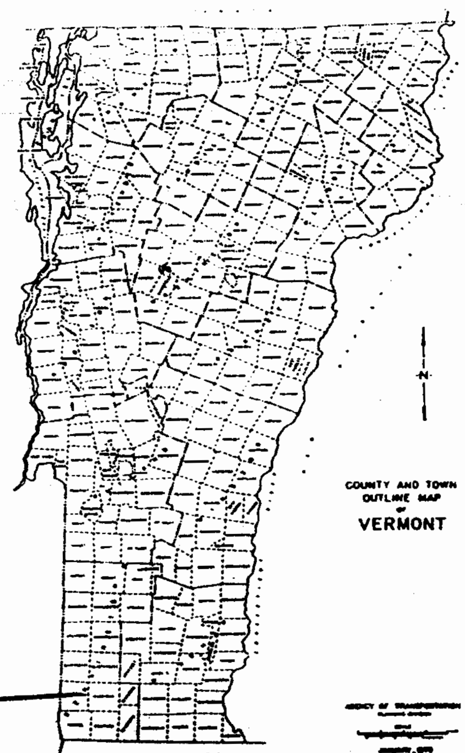
Aerial Photographs

Series	Photograph Number	Scale
VT7420	3-170/171	1:20000

MWY/1b1536

Figure 1
Jard Company
EPA ID # VTD04814174





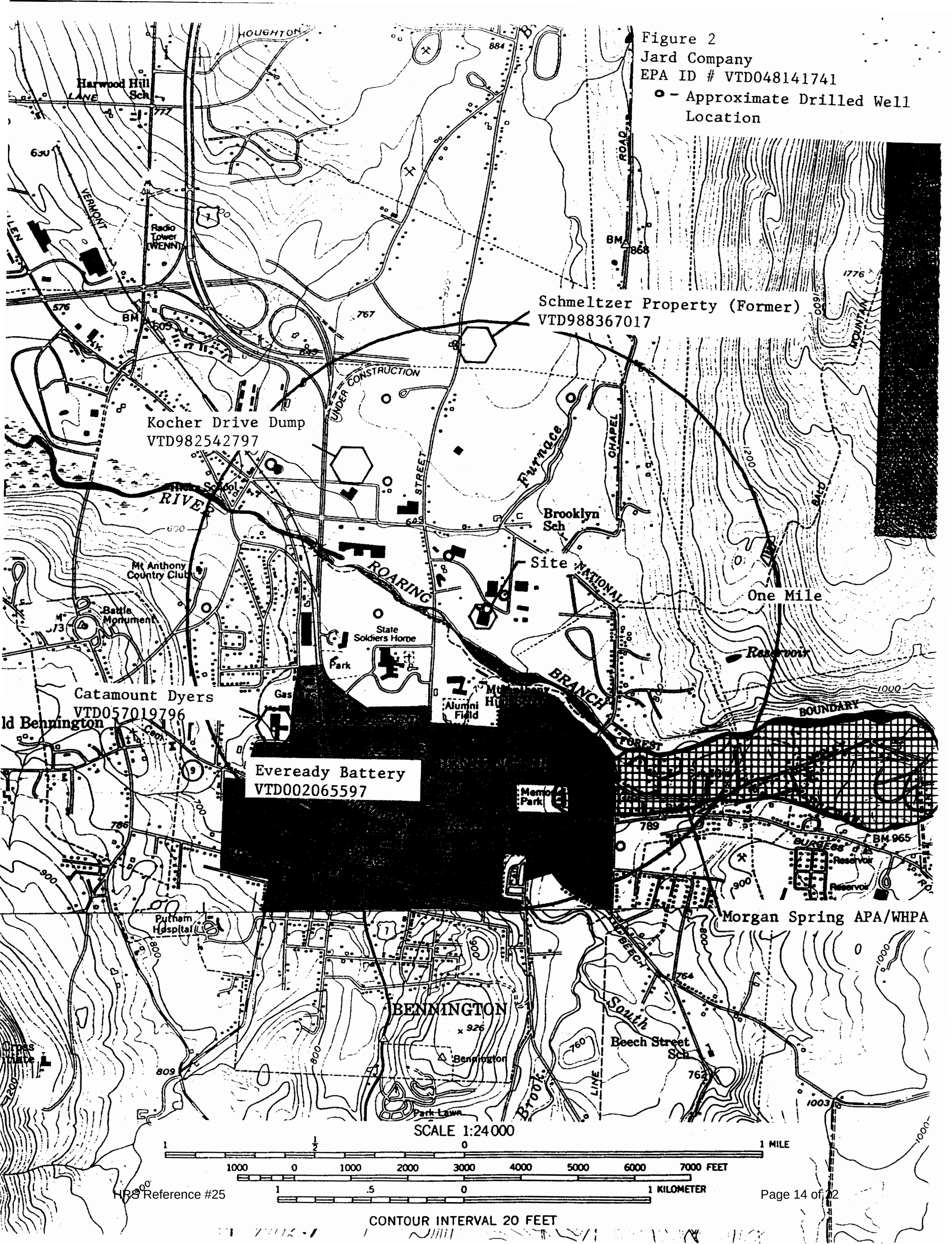
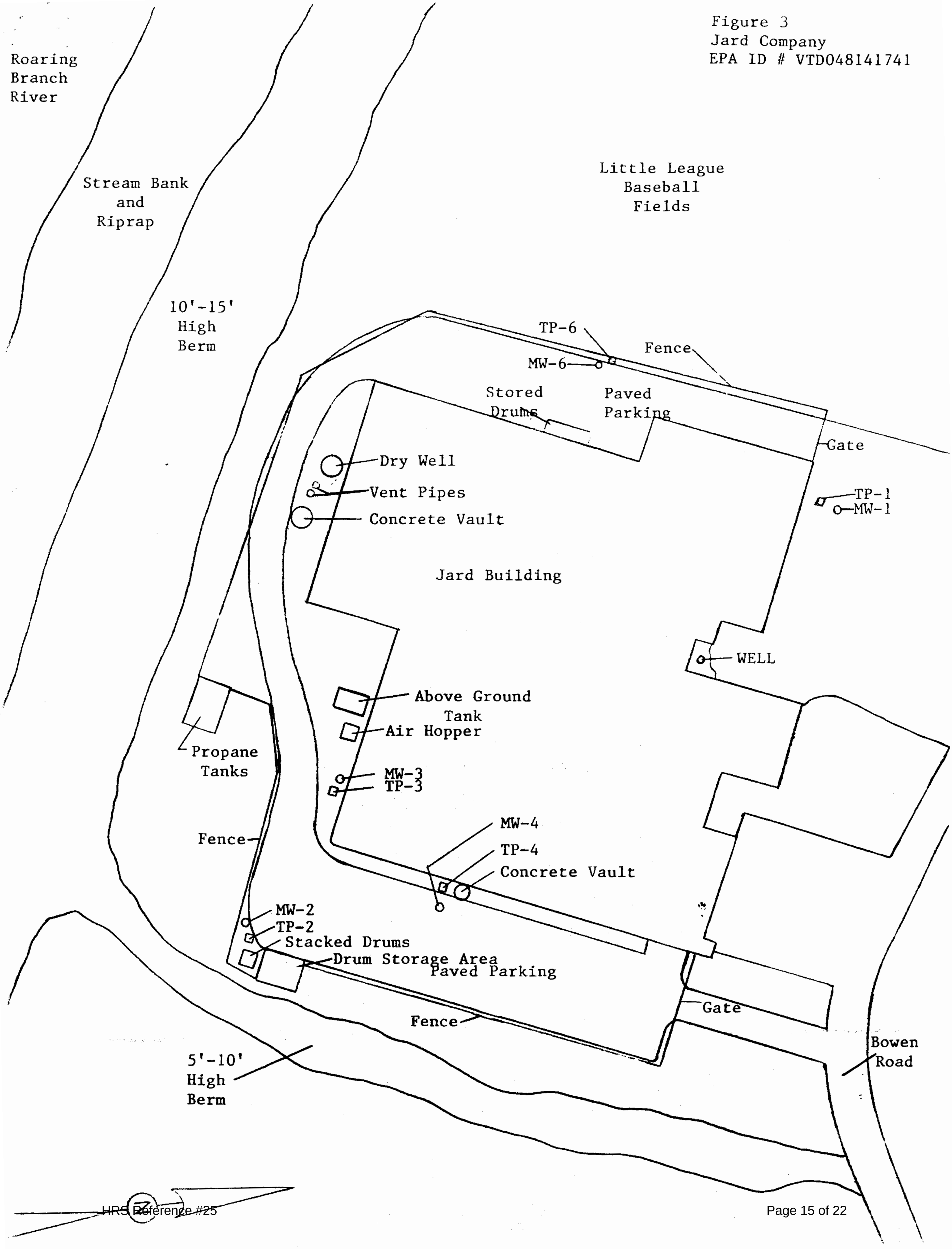


Figure 2
Jard Company
EPA ID # VTD048141741
o - Approximate Drilled Well Location
Schmeltzer Property (Former)
VTD988367017
Kocher Drive Dump
VTD982542797
Site
One Mile
Catamount Dyers
VTD057019796
Eveready Battery
VTD002065597
Morgan Spring APA/WHPA
Harwood Hill Sch
Radio Tower (WENN)
Mt Anthony Country Club
Battle Monument
State Soldiers Home
Park
Alumni Field
Brooklyn Sch
Reservoir
Memorial Park
Putnam Hospital
BENNINGTON
Beech Street Sch
Park Lawn
ROARING BRANCH
Furnace
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
CONTOUR INTERVAL 20 FEET

Figure 3
Jard Company
EPA ID # VTD048141741



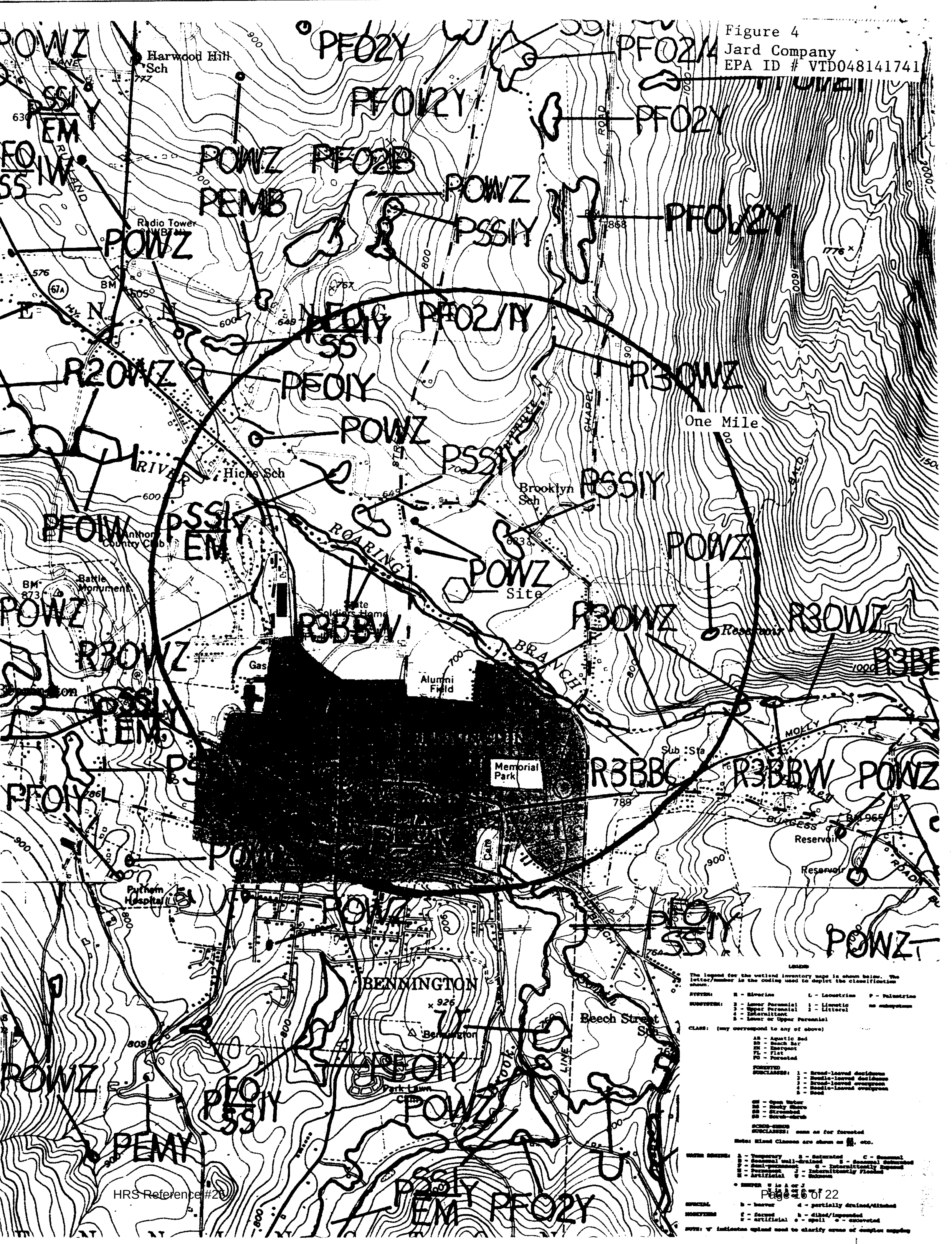


Figure 4
Jard Company
EPA ID # VTD048141741

Table 1
Sample Locations
for Phase I Assessment

JC 01/02	Soil samples vicinity of TP-2.
JC 03/04	Soil samples vicinity of TP-4.
JC 05/06	Liquid/sediment samples from concrete vault adjacent to TP-4.
JC 07/08	Soil samples vicinity of air hopper.
JC 09/10	Soil samples vicinity of dry well (area of PCB spill).
JC 11/12	Liquid sample from vent pipes.
JC 13	Sediment sample from floor drain in Jard building.
JC 14	Sediment sample from concrete vault.
JC 15	Soil sample vicinity TP-6.
JC 16	Soil sample vicinity TP-1.

Table 2
Phase I Sampling Results
Heavy Metals

Compound	JC01	JC06	JC12	JC14
Antimony	<20.1	<58.8	<0.20	<25.3
Arsenic	<0.51	<1.50	<0.005	0.73
Beryllium	<2.4	<2.80	<0.01	<2.90
Cadmium	<1.0	<2.94	<0.01	7.70
Chromium	<2.51	<7.35	<0.025	9.22
Copper	9.03	82.9	1.27	282
Lead	<0.51	8.97	0.331	3.07
Mercury	0.25	1.41	0.0004	2.43
Nickel	9.43	<7.36	<0.025	15.4
Selenium	<2.51	<1.47	<0.025	<6.31
Silver	2.40	<2.94	<0.10	<1.26
Thallium	<1.20	<1.40	<0.005	<1.40
Zinc		SEE TABLE 3		

Expressed in mg/kg
(JC06, JC12 expressed in mg/l)

JARD COMPANY

TABLE 4

PHASE I SAMPLING RESULTS

VOLATILE ORGANIC CHEMICALS

COMPOUND	JC01	JC02	JC03	JC04	JC05	JC06	JC07	JC08	JC09	JC10	JC11	JC12	JC13	JC14	JC15	JC16
Methylene Chloride	220	<1.1	<5.6	<62	<1.0	<140	<1.1	<1.1	<1.1	<1.1	1.6	2	<250	22	<1.2	27
1-1-1 Trichloroethane	180	12	<5.6	<62	<1.0	<140	<1.1	<1.1	<1.1	<1.1	<1.0	36	560	<1.4	<1.2	<1.0
Trichloroethene	4,300	36	<5.6	<62	<1.0	<140	2.2	<1.1	11	<1.1	2.2	23	2,000	<1.4	<1.2	<1.0
Chlorobenzene	<60	9.9	<5.6	<62	<1.0	<140	6.6	<1.1	<1.1	<1.1	<1.0	1	<250	<1.4	<1.2	<1.0
1,1-Dichloroethane	<60	8.8	<5.6	<62	<1.0	<140	<1.1	<1.1	<1.1	<1.1	<1.0	<1.0	<250	<1.4	<1.2	<1.0
Chloroform	<60	<1.1	10	<62	1.8	<140	3.3	<1.1	8	3.3	40	<1.0	<250	<1.4	1.2	2.8
trans-1,2-Dichloroethene	<60	<1.1	<5.6	<62	<1.0	150	<1.1	<1.1	<1.1	<1.1	<1.0	<1.0	<250	<1.4	<1.2	<1.0
Bromodichloromethane	<60	<1.1	<5.6	<62	<1.0	<140	<1.1	<1.1	<1.1	<1.1	1.3	1	<250	<1.4	<1.2	<1.0
1,2-Dichlorobenzene	<60	<1.1	<5.6	<62	<1.0	<140	<1.1	<1.1	<1.1	<1.1	<1.0	*	<250	<1.4	<1.2	<1.0
1,1,2-Trichloroethane	<60	<1.1	<5.6	<62	<1.0	<140	<1.1	<1.1	<1.1	<1.1	<1.0	<1.0	820	<1.4	<1.2	<1.0
Ethylbenzene	<60	<1.1	<5.6	<62	<1.0	1,300	7.7	<1.1	<1.1	<1.1	<1.0	<1.0	<250	<1.4	<1.2	<1.0
Benzene	<60	<1.1	<5.6	<62	<1.0	<140	16	<1.1	<1.1	<1.1	<1.0	<1.0	<250	<1.4	<1.2	<1.0
Toluene	<60	<1.1	<5.6	<62	<1.0	12,000	<1.1	5.2	2.3	<1.1	<1.0	<1.0	<250	<1.4	<1.2	<1.0
Xylenes	<60	<1.1	<5.6	<62	<1.0	10,000	23	<1.0	<1.1	<1.1	<1.0	4.5	<250	<1.4	<1.2	<1.0

Results expressed in ug/kg.

JC05, JC11, JC12 results expressed in ug/l.

* 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene present collectively at 300 ug/l.

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TABLE 3

10/25/91 SAMPLING RESULTS

PHTHALATES, AROCLOR, ZINC

:OMPOUND	JC01	JC02	JC03	JC04	JC05	JC06	JC07	JC08	JC09	JC10	JC11	JC12	JC13	JC14	JC15	JC16
)imethylphthalate	<240	<350	<100	<250	<100	<130	<350	<1.5	<1,800	<180	<0.01	<3.5	<1,000	<86	<3.5	<0.01
)iethylphthalate	<240	<350	<100	<250	<100	<130	660	<1.5	<1,800	<180	<0.01	<3.5	<1,000	<86	<3.5	<0.01
)i-n-butyl phthalate	<240	<350	<100	<250	<100	<130	<350	2	<1,800	<180	<0.01	<3.5	<1,000	<86	<3.5	<0.01
3enzyl butyl phthalate	<240	<350	<100	<250	<100	<130	<350	<1.5	<1,800	<180	<0.01	<3.5	<1,000	<86	<3.5	<0.01
›is (2-Ethylhexyl) phthalate	4,200	1,500	180	<250	<.1	810	30,000	2	20,000	3,000	<0.01	15	36,000	1,400	15	<0.01
)i-n-octylphthalate	<240	<350	<100	<250	<100	<130	<350	<1.5	<1,800	<180	<0.01	<3.5	0.146	<86	<3.5	<0.01
\roclor 1242	11	5.1	270	180	0.16	280	820	35	32	28	<0.0005	690	4,900	98	6.7	<0.0005
:inc	2,960	614	64,900	466,000	5.55	11,500	36,700	112,000	78,500	18,100	0.146	5	753	191,000	1,480	0.054

:esults expressed in mg/kg.

!C05, JC11, JC12 results expressed in mg/l.

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TABLE 6

PHASE II MONITOR WELL/TEST PIT

GROUNDWATER SAMPLE RESULTS

COMPOUND	MW-1A	MW-2A	MW-3A		MW-3B		MW-4A	MW-6A	FIELD BLANK	TP-1GW	TP-2GW	TP-3GW	TP-5GW
			WP	OP	WP	OP							
Vinyl Chloride	<1.0	<1.0	3	<500	3	<500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	24	2,200	24	2,100	<1.0	11	<1.0	<1.0	<1.0	22	<1.0
trans-1,2-dichloroethene	<1.0	<1.0	14	1,400	15	1,500	<1.0	<1.0	<1.0	<1.0	<1.0	7	<1.0
1,1,1-Trichloroethane	<1.0	<1.0	6	2,500	7	2,400	4	6	<1.0	<1.0	19	8	<1.0
Trichloroethene	<1.0	<1.0	<1.0	<500	<1.0	<500	<1.0	6	<1.0	<1.0	23	<1.0	<1.0
Chlorobenzene	<1.0	<1.0	<1.0	550	<1.0	720	<1.0	<1.0	<1.0	<1.0	<1.0	8	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	4	1,500	7	10,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<1.0	<1.0	17	14,000	24	30,000	<1.0	7	<1.0	<1.0	<1.0	36	<1.0
Ethylbenzene	<1.0	<1.0	<1.0	<500	2	1,800	<1.0	<1.0	<1.0	<1.0	<1.0	10	<1.0
Toluene	<1.0	<1.0	11	<500	13	8,400	<1.0	<1.0	<1.0	<1.0	<1.0	48	<1.0
Total Xylenes	<1.0	<1.0	3	<500	13	1,600	<1.0	<1.0	<1.0	<1.0	<1.0	79	<1.0
Diethylphthalate	<10	<10	<10	<500	<10	<500	<10	<100	<100	<0.02	<0.02	23	<0.02
bis (2-ethylhexyl) phthalate (mg/l)	0.033	0.053	110,000	<500	98,000	<500	0.038	2.8	0.026	0.13	0.23	5,500	0.15
Aroclor 1242 (mg/l)	0.022	0.093	390	2,500	280	3,100	0.023	0.16	<1.0	0.03	0.06	3	0.07
Zinc (mg/l)	0.2	0.03	3.2	<500	5.9	<500	0.07	0.06	<1.0	0.09	4.9	32	3.0

Results expressed in micrograms per liter (u/l), except where noted.

Other compounds in EPA Schedules 601, 602, 606 and 608 were below applicable quantitation limits.

MW-3B is a duplicate of MW-3A.

WP - water phase

OP - oil phase

Table 5

Phase II Soils Sample Results

Compound	TP-1A	TP-1B	TP-1C	TP-2A	TP-3A	TP-4A	TP-5A	TP-5C	TP-6A	TP-6C
Total Xylenes (ug/kg)	<1.0	<1.0	<1.0	<1.0	3	<1.0	<1.0	<1.0	<1.0	<1.0
Diethylphthalate	<0.35	<0.35	<0.35	1.1	<180	0.75	<0.35	<0.35	<0.35	<0.35
Di-n-butyl phthalate	0.38	<0.35	<0.35	<0.35	<180	1.0	0.93	<0.35	<0.35	0.66
bis(2-ethylehexyl) phthalate	<0.35	<0.35	<0.35	33	3000	130	4.1	<0.35	4.1	<0.35
Di-n-octylphthalate	<0.35	<0.35	<0.35	<0.35	<180	<0.35	1.1	<0.35	<0.35	<0.35
Aroclor 1242	7.5	2.1	1.1	0.6	77	37	10	0.3	13	35
Zinc	26	19	20	94	2600	940	43	82	56	120

Results expressed in milligrams per kilogram (mg/kg), except where noted.

All other compounds in EPA Schedules 601, 602, 606, and 608 were below applicable quantitation limits.